long; the tarsal spines and calcaria rufous. Wings uniformly fuscous-violaceous, the nervures black. Abdomen thickly pruinose; the basal three segments broadly depressed at the apex, the apical two thickly covered with fulvous pubescence, the ventral surface thickly with pubescence, which is pale on the basal, darker on the apical, segments. 9.

Length 13 mm.

Front and ocellar region distinctly punctured; there is a broad deep furrow below the ocellus. Face and elypcus thickly covered with silvery pubescence; the apex of elypeus rounded, smooth, bare, and shining. The white hair on the thorax is thicker and longer on the pleuræ, and, to a less extent, on the apex of metanotum. Mesonotum and scutellum punctured all over, but not closely or strongly; the postscutellum is more weakly punctured. Metanotum finely, closely, transversely striated. The lower part of the pro- and mesopleuræ striated at the apex. Sternal process has a broad keel down the middle, the apical lobes rounded. Second cubital cellule in front one third of the length of the third; the first recurrent nervure is received the length of the top of the second cubital cellule from the base, the second shortly behind the middle of the cellule.

[To be continued.]

## BIBLIOGRAPHICAL NOTICES.

Trouessart's 'Catalogue of Mammals.'

Catalogus Mammalium, tam Viventium quam Fossilium. By E. I., Trouessart. Quinquennale Supplementum: Pt. 2. Rodentia. Berlin, 1904. Pp. 289-546. Price 12s.

Since the general remarks which appeared in our notice of the first part of the reissue of this valuable Catalogue apply also to the one before us, our comments on the latter may be relatively brief. It is highly satisfactory to find that Dr. Trouessart is making such good progress with his arduous task, this fasciculus bringing the work down to the end of the Rodents. Of course there are faults in this part, as in its predecessor, for no human being could possibly carry out such a piece of work without making some errors; but such mistakes as have come under our notice are trivial, and in no wise detract from the value of the Catalogue or from the credit due to the indefatigable author for carrying out his task so thoroughly. The value of this Catalogue to practical workers is simply inexpressible.

Comparing the present classification of the Rodentia with that adopted a dozen years ago, the most notable changes (apart from those in the nomenclature and the number of generic and subgeneric divisions of some of the existing groups) are to be found among the extinct forms. We notice, for example, the inclusion in the order of a number of Eocene genera, such as Plesiadapis, Indrodon, and Microsyops, which were originally regarded as lemuroids or insectivores, but are now considered by American palaeontologists to represent a primitive group of rodents—the Protoglires. Whether this identification is well founded remains to be seen. Another important and apparently well-justified change is the transference of the Oligocene and Miocene Trechomys, Theridomys, and their allies from the neighbourhood of the Octodontidae to a position in the Sciuromorpha between the Anomaluridae and the Sciuridae. The extinct Maltese Leithia, together with Pseudosciurus and Sciuroides, is now definitely placed in the Anomaluridae, although the right of the latter to retain its position in the Sciuromorpha is only provisionally admitted.

In accordance with advanced modern views, we find the old genus Sciurus split up into a number of separate generic groups; and we note many other changes in nomenclature, such as the substitution of Jaculidæ for Dipodidæ, thus showing that the author is keeping his work well abreast of the latest innovations. Why, however, Myoxidæ is retained in place of Gliridæ is not easy to understand; and the substitution of the name Agoutidæ for Dasyproctidæ, on account of the replacement of the generic term Caelogenys by Agouti, seems altogether uncalled for, seeing that Dasyprocta still remains as the generic title for the agutis. The number of new specific names proposed in this fasciculus appears to be very small.

## Museum Handbooks.

The Manchester Museum, Owens College. 1904.

UNDER the direction of Dr. W. E. Hoyle, the Director, papers relating to the Manchester Museum and its contents are from time to time issued to the public. For the most part these are gathered from various serial journals, consequently their re-issue in the present form will be welcomed.

Three of these are now before us, of which two deal with

matters palæontological and one with recent Cephalopods.

Mr. H. Bolton's 'Palæontology of the Lancashire Coal-Measures' provides a useful summary of this subject, especially helpful to those working in the museum, where the specimens described are

deposited.

Prof. W. Boyd Dawkins has prepared the second of these paleon-tological pamphlets, 'On the Discovery of *Elephas antiquus* at Blackpool.' He takes for his text the finding of a tooth of this species, which he, with the aid of his wife and son, dug up by the aid of umbrellas! Having described the tooth he passes on to discuss the question, "How did the tooth . . . . come to be embedded in the Lower Boulder-Clay?" In answering this question the author gives some interesting and valuable information on the deposition of the boulder-clay and of other fossil Mammalia found in association with this Elephant.

Dr. Hoyle's 'Diagnostic Key to the Genera of Recent Dibranchiate Cephalopoda' is necessarily extremely technical, but it will, without question, prove invaluable to those desiring to identify

adults of this group.

We venture to think the prices charged for the papers by Dr. Hoyle (one shilling and sixpence) and Mr. Bolton (one shilling) a little high, at least when compared with the wonderful shillingsworth provided by the authorities of the Natural History Museum at S. Kensington. But probably the authorities of the Manchester Museum cannot afford to publish these handbooks at a loss, or at least with but an infinitesimal profit!

## MISCELLANEOUS.

On a Marine Pseudoscorpion from the Isle of Man. By A. D. IMMS, B.Sc. (Lond.), Zoological Laboratory, University of Birmingham.

About the shores of Port Erin Bay, during August 1904\*, I came across a species of pseudoscorpion which frequented the rocks about halfway between the limits of high and low tides. The fact of this being so unusual a habitat for an animal belonging to this order led me to make a careful search for it, but it resulted, however, in my obtaining only five individuals. They were found to agree in all respects with *Obisium maritimum*, Leach, and I am indebted to the Rev. O. Pickard-Cambridge, F.R.S., for confirming my identifi-

cation of that species.

Four of the specimens were found deep in the crannies and fissures with which the slaty rocks of the locality abound, while the fifth example was met with in the act of crawling over the rocks and weed. The first specimen was obtained while searching for the eggs of the marine Collembolan Anurida maritima. To discover the latter it is necessary to be provided with a stout hammer and chisel in order to split open the fissures in the depths of which they are deposited. In the recesses of these fissures there are to be found, in addition to the pseudoscorpion, adults of Anurida maritima, larvæ, pupæ, and imagines of the Coleopteron Micralymma brevipenne, and numerous individuals belonging to a species of an Acarus, which I have not yet been able to determine. It is probable that the Obisium preys upon the Collembola and most likely upon the Acari also. When alarmed or irritated, it was observed to run about actively in both a forward and backward direction with outstretched pedipalps, but it was not seen to run sideways, as is known to be the ease with some pseudoscorpions.

The nature of the habitat of *Obisium* and of the other Arthropods associated with it is such that they have to endure submersion twice every twenty-four hours. Unlike *Anurida* (or, according to Laboulbène, *Micralymma*), *Obisium* has no efficient hairy covering

<sup>\*</sup> While occupying the talle rented by Birmingham University at the Biological Station, Port Erin.